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SUGGESTED SCHOOL HEALTH POLICIES. FOURTH EDITION.
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THE FOURTH EDITION OF A GUIDE FIRST PUBLISHED IN 1940 OUTLINES IMPORTANT FEATURES OF AN ACCEPTABLE SCHOOL HEALTH PROGRAM. HEALTH EDUCATION IS DEFINED AS AN APPLIED SCIENCE CONCERNED WITH MAN'S UNDERSTANDING OF HIMSELF IN RELATION TO HEALTH MATTERS IN A CHANGING SOCIETY. SUGGESTIONS ARE GIVEN FOR DEVELOPING A HEALTH EDUCATION CURRICULUM. POLICIES FOR SCHOOL HEALTH SERVICES ON APPRAISAL, COUNSELING AND INTERPRETATION, EMERGENCY CARE, AND COMMUNICABLE DISEASE PREVENTION AND CONTROL ARE REVIEWED. ASPECTS OF A POSITIVE SCHOOL CLIMATE ARE DESCRIBED FOR PHYSICAL, MENTAL, AND EMOTIONAL HEALTH. PHYSICAL EDUCATION PROGRAMS FOR ELEMENTARY AND SECONDARY SCHOOLS ARE EVALUATED. A HEALTH PROGRAM IS PRESENTED FOR THE PHYSICALLY AND MENTALLY HANDICAPPED. QUALIFICATIONS OF SCHOOL HEALTH PERSONNEL AND THEIR TRAINING ARE DESCRIBED. A BIBLIOGRAPHY OF 43 ITEMS PUBLISHED BETWEEN 1953 AND 1965 IS APPENDED. THE GUIDE IS A PUBLICATION OF THE JOINT COMMITTEE ON HEALTH PROBLEMS IN EDUCATION OF THE NATIONAL EDUCATION ASSOCIATION AND THE AMERICAN MEDICAL ASSOCIATION. THIS DOCUMENT IS AVAILABLE FROM THE NATIONAL EDUCATION ASSOCIATION, 1201 SIXTEENTH STREET, N.W., WASHINGTON, D.C. 20036, OR THE AMERICAN MEDICAL ASSOCIATION, 535 NORTH DEARBORN STREET, CHICAGO, ILLINOIS 60610, FOR $0.30. (JK)

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suggested school health policies

Fourth Edition

Prepared by the National Committee on School Health Policies of the NEA and the AMA

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Foreword

ALL SCHOOLS should have written policies consistent with sound professional judgment. Carefully developed health policies delineate the responsibilities of each member of the health team. The classification of responsibility results in mutual understanding and cooperation among the members of the health team, between the team and the school staff, the parents, and the community.

Policies can be defined as general statements of accepted courses of action. Specific procedures based on general policy vary with local conditions and must be specifically developed at the community level. This fourth edition has been rewritten to define the principles and general policies upon which health procedures are based. The administrator and the health team have the responsibility to develop specific practices in detail. The development of health policies by a school or college, based on the principles suggested, will improve the health status both of the pupils and of the community in general.

School health policies can be put into effect successfully only with administrative understanding, consideration, support, and action. Consequently, these statements—agreed upon through interprofessional and interagency cooperation and deliberation—are addressed particularly to administrators but also to *all* other persons concerned with the health of the school child.

As a secondary objective, the fourth edition of *Suggested School Health Policies* serves as a summary of the essential policies covered in *School Health Services, Health Education,* and *Healthful School Living,* and of other publications of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association.

Persons who might find this pamphlet helpful are administrators (superintendents, principals, supervisors), physicians and nurses serving the school, members of school boards, members of boards of health, private physicians, and voluntary agency personnel. Among the others who might read or consult this document with interest and profit are the following: teachers; health officers and their staffs; dentists and dental hygienists; psychologists; nurses; health educators; counselors and coordinators; social workers; custodians; students of education, medicine, nursing and other health sciences; and members of school and community health committees.

Origin and Development of *Suggested School Health Policies**

The first edition, 1940 The Child Hygiene Section of the American Public Health Association published the first edition of *Suggested School Health Policies* in 1940 after they had published a similar report in the Ninth Yearbook of the American Public Health Association. These two reports, covering all aspects of school health, followed a report by the Joint Committee on Health Problems in Education of the National Education Association and American Medical Association on attitudes of various professional persons on a selected number of school health procedures.

Chairman of the publication committee was Charles C. Wilson, M.D. Other members were Mary E. Chayer and Harold H. Mitchell, M.D.

The report was endorsed by the following organizations: American Academy of Pediatrics; American Medical Association; American Association for Health, Physical Education, and Recreation; Educational Policies Commission; American School Health Association; National Organization for Public Health Nursing; and Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association.

The second edition, 1946 In 1946, the National Conference for Cooperation in Health Education, a group whose membership at the time included members of most organizations concerned with school health, endorsed the new edition. In addition to those endorsing the first edition, the new edition was endorsed by the American Association of School Administrators, American Association of Teachers Colleges, American Dental Association, American Public Health Association, Secondary School Principals Association, U.S. Children's Bureau, U.S. Office of Education, and U.S. Public Health Service.

Charles C. Wilson, M.D., Chairman, and Justus J. Schifferes prepared the second edition.

The third edition, 1956 Since the National Conference for Cooperation in Health Education was not in a position to publish and distribute the new report, it requested that this be done by the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. This Committee published the third edition of *Suggested School Health Policies* in booklet form

*A more detailed history may be obtained from the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, Washington, D.C, and Chicago.

in 1956. Representatives of 17 organizations participated in preparation of the pamphlet. New organizations involved were the Association of State and Territorial Health Officers, Council of Chief State School Officers, National Education Association, and the National League for Nursing.

Charles C. Wilson, M.D., was Chairman and Elizabeth S. Avery, Ph.D., was secretary of the group responsible for the 1956 edition.

The fourth edition, 1966 The Joint Committee on Health Problems in Education invited eighteen organizations to appoint representatives to serve as a National Committee on the Revision of *Suggested School Health Policies.* John L. Reichert, M.D., was appointed editor to revise the pamphlet.

New organizations involved in preparation of the current booklet were the American Psychiatric Association, the National School Boards Association, and the Association for Supervision and Curriculum Development.

Members of the Committees writing the first, second, and third editions are listed below.

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Introduction: General Health Policies

The central purposes of education

HEALTH is a primary objective of modern education. Health was cited as one of the seven main objectives of education in the 1918 report of the Commission on the Reorganization of Secondary Education.[1] In 1938, the Educational Policies Commission stated that "An educated person understands the basic facts concerning health and disease... and works to improve the health of the community."[2] More recently the Commission stated:

> The central purpose of education is to develop rational powers of the individual or his capacities to think and reason.... Basic to this development is physical health since disease, defects, or disability may interfere with learning. Mental health is also of profound importance; with it the pupil may have the desire and respect for learning that promotes optimum mental performance; without it the likelihood of such development is drastically reduced if not rendered impossible.... Health, for example, depends upon a reasoned awareness of the value of physical and mental fitness and the means by which these may be maintained.... Making intelligent decisions relating to the individual and community health requires the exercise of one's rational reasoning powers and an understanding of the scientific factors involved.[3]

Every school has numerous opportunities to promote the health of pupils and other members of the community. Most boys and girls are enrolled in schools and are under the supervision of school staffs for a substantial part of the day for approximately half the days of the year. The conditions under which childern live in school and outside, the help they are given in solving their health problems, the ideals of individual and community health which they form, and the information

[1]U.S. Department of the Interior, Bureau of Education. *Cardinal Principles of Secondary Education*. Bulletin 1918, No. 35. Washington, D.C.: Superintendent of Documents, Government Printing Office, 1918.

[2]National Education Association and American Association of School Administrators, Educational Policies Commission. *The Purposes of Education in American Democracy*. Washington, D.C.: The Commission, 1938.

[3]National Education Association and American Association of School Administrators, Educational Policies Commission. *The Central Purpose of American Education*. Washington, D.C.: The Commission, 1961.

and understanding that they acquire of themselves as human beings influence the development of the attitudes and behavior conducive to healthy, happy, and successful living—present and future. In all its efforts, the school must consider the total personality of each pupil and the mutual interdependence of physical, social, and emotional health.

The school obviously does not operate in a vacuum. It is an integral part of the community, subject to all community influences, and obligated to participate in all wholesome community activities. This participation may in part be through community councils or committees. The various forms which community councils or committees may take are discussed later in this report. Here the emphasis is upon those functions in which the community participates with school representatives as distinguished from those operating within the school system or the individual school.

Among community relationships important to the school health program, those with medical and related organizations stand high in order of priority. The medical and dental societies (or in small communities the individual physicians and dentists) can be extremely valuable as consultants and participants in school health programs. Nurses are indispensable as resource persons. Much valuable aid and counsel can come from the voluntary health agencies and from the service agencies of various kinds whose objectives include the betterment . . . of personal and community health. The school system or school that fails to benefit from these community movements deprives itself of much of its effectiveness.

The problem of fitness

Considerations leading to sound policies for the *total* fitness of school children should recognize the new prominence of fitness in the thinking of both professional and lay groups. This recent emphasis, as with any new development, attracts entrepreneurs who resort to quackery and charlatanism at the expense of children and youth. The school has a delicate, difficult, and important role in getting the best out of this awakened public awareness and in winnowing the wheat from the chaff.

The need for policies

Basic policies give direction to efforts designed to protect and improve the health of children and youth. They evolve from accurate, objective understandings of the health needs of children. Policies grow out of experience, are guided by expert judgment, and include statements of specific goals.

Every school program should embrace established workable written policies to assure every pupil of 1) healthful school living conditions, including the mental-emotional atmosphere; 2) appropriate health and

safety education; 3) effective school health services; 4) healthful physical education, including competitive sports opportunities; and 5) teachers and other school personnel who are themselves physically and emotionally healthy and who have up-to-date preparation for their special responsibilities. Sound policies for the education and care of handicapped children are equally essential.

The help of many is needed

Parents have the primary responsibility for the health of their children. The health efforts of schools, health departments, and other agencies should be so conducted as to help parents recognize and assume their responsibilities.

Schools alone cannot enable pupils to attain all the desirable goals of individual and community health. Considering the magnitude and diversity of health needs, it is fortunate that many people and groups, in addition to schools, are greatly interested in promoting health.

Physicians, dentists, nurses, health educators, public health officers, and social and welfare workers, and their professional and official organizations, such as dental, medical, and nursing societies, health departments, voluntary health agencies, and social agencies are all rightfully concerned with health activities in their communities.

Cooperation is the keynote to coordinating the efforts of those concerned with child health. Only through cooperation and coordination can schools and communities develop balanced programs of health education and health services. Only thus can a school avoid overemphasis of one phase of its health program with corresponding neglect of other equally vital areas. School health policies should be formulated to achieve the maximum cooperation and coordination both within each school and each school system and between school and community.

Committees and councils promote cooperation

Throughout the country, committees, councils, and other types of coordinating groups have been developed to facilitate interprofessional and interagency understanding and cooperation. Where such action is contemplated, emphasis should be placed on the functions to be performed rather than on organizational structure. The committee or council is only a means to an end, the end being improved health for children and youth achieved through cooperative effort. The council or committee may well begin its activities by considering existing problems. A school health council, closely allied with an organization representing communitywide interests, can be an effective group for promoting coordination, evaluating progress, and planning future developments. The membership of a council or committee varies with the problems to which attention is to be given.

School health advisory committee If limited to matters concerning a single school, the committee may be composed of administrators, teachers, parents, cafeteria managers, the physician, and the nurse serving the school. When attention is centered on sanitation, the custodian may be invited to participate in committee activities. Where available, and when the problems being considered are appropriate, a psychologist, social worker, or dentist may serve on the committee. Frequently pupils are members of health committees or councils.

A committee may meet at regular intervals or as particular problems arise. Suggestions for changes in school health procedures should be presented to the administrator for approval and action.

Community-school health advisory council A city or district school health advisory council is usually designed for purposes somewhat different from those of a single school health advisory committee. It provides an opportunity to bring together representatives of parents, teachers, school administrators, the health department, the dental and medical professions, and the voluntary health and social agencies.[4] The composition of the council may vary from time to time depending on the problems on which attention is focused.

When organized and conducted on democratic principles, the school health council provides advantageous machinery for developing communitywide understanding of school health procedures and for devising effective measures for improving the health of children and youth. Such councils serve in an advisory capacity to school administrators.

Although the composition and function of city or district school health advisory councils should be adapted to local interests and needs, the following criteria are worthy of consideration:

1) The purposes, objectives, and policies of the council should be stated clearly and reviewed periodically.

2) The council should include representation from the school administration (superintendent or his administrative representative); parents; the school staff; the health department; medical, dental, and nursing societies; and community agencies with programs related to personal and community health. The organization should remain flexible.

3) Each group should be given an opportunity to select its own representatives. Officers should be elected by the council for a specified term.

4) The council should meet regularly with a prepared agenda.

[4]In the publications, *Teamwork in School Health*, Washington, D.C.: American Association for Health, Physical Education, and Recreation, 1962 and *Health Education*, Washington: The Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, 1961, means are suggested through which coordination of efforts can be achieved.

5) Each group should be permitted to present any health problem of school children for council consideration. Particular attention should be given to problems requiring joint action by the schools and other community agencies and those that involve participation by two or more professional groups.

6) Use should be made of subcommittees, but these should relate in function to the council as a whole.

7) Although long-term projects are necessary and appropriate, projects which can be completed successfully in a short period of time should not be neglected.

8) Publicity should be given throughout the community to the council's progress and accomplishments.

9) Emphasis should be placed on solving pertinent problems such as developing written emergency procedures rather than on organization or on routine procedures.

10) All members of the council should be involved in planning, recommending, and evaluating programs.

In this report, policies are stated in terms of the ideal program, practice, procedure, and personnel. For example, in certain places it is suggested that certain problems be referred to specialized health personnel. Although it is recognized that many schools, particularly in rural areas, will not immediately have such personnel available, it is still the best policy for every school to have available from some source the services of a physician, dentist, nurse, health educator, psychologist, social worker, and nutritionist.

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Joint Committee on Health Problems in Education ... inside back cover

1. School Health Education

HEALTH EDUCATION programs are a vital force in closing the gap between scientific health discoveries and their application. Health education is an applied science concerned with man's understanding of himself in relation to health matters in a changing society. It is not the hygiene of yesteryear. It is not physiology, anatomy, biology, physical education, or physical fitness. It is an academic field and subject.

Health education in elementary and secondary schools, in colleges, and in universities should provide the essential scientific health knowledge and foster wholesome attitudes and practices for healthful living.

The National Education Association Project on Instruction states:

> The physical and mental health needs of many children are not being met by the family or any other agency. If a student has difficulties with health or with emotional adjustment, the school can make little progress in encouraging his intellectual development until these problems are solved.... The content of health instruction belongs in the school curriculum because such knowledge is necessary, is most efficiently learned in school, and no other public agency provides such instruction.[1]

School administrators and persons involved in teacher education can help solve the many health problems of youth by providing a planned curriculum including formal courses in health taught by qualified teachers.

In planning for the curriculum in health education, schools need to consider policies related to 1) who shall decide the content and educational experiences to be included, 2) what content shall be included, 3) what approaches shall be used, 4) what time shall be allotted, 5) who shall teach, 6) how in-service education shall be provided, and 7) what materials and resources shall be utilized.

Responsibility for school health education

The governing board of each school district through its representative, the school administration, is responsible for the health education program. Oliver E. Byrd, M.D., states "... a program of quality in this area can be found in schools only when the associated administrators recognize and accept their opportunities and responsibilities and move in fundamental and practical ways to meet them." He continues, "Only the administrator who *wants* to improve the school health program can be expected to do so."[2]

A health advisory committee is often assigned the responsibility of deciding what shall be included in the health education curriculum.

A school health advisory council (or committee) or one of its subcommittees on health instruction (or health curriculum) provides the structure to include interdisciplinary members on the team. Representatives comprising such a planning group include a member of the administration; the curriculum director; a teacher of health or a health educator; an elementary teacher; a health coordinator; a supervisor; health service personnel, including the physician and nurse serving the school; teacher representatives, such as those from related fields of science, social science, physical education, and home economics; community representatives, including such persons as the PTA health chairman, a community health educator, a voluntary agency representative and other community leaders. Students should have a voice in planning what to teach through their health instruction committee.

Who shall teach health

The classroom teacher is responsible for health teaching at the elementary level. He should have had at least one course in health education in addition to his general college health course.

The most essential element in successful health education at the junior high and secondary level is the professionally qualified health teacher. This person should be one who has chosen health education as a career. He has completed a health education major along with successful student teaching and/or teaching experience in health education. A teacher with minimum professional background has at least a health education minor along with successful student teaching and teaching experience which includes health education. A genuine interest in health teaching is necessary for the teacher with either the major or minor; however, this is particularly necessary for the teacher with minimum background since this interest provides the motivation to keep up to date. Science, physical education, social science, or home economics teachers with health education backgrounds and a keen interest in health education can do effective health teaching. It is essential, however, that these teachers, if assigned to health teaching by the administrator, be given sufficient time from other teaching assignments to permit them to do quality health teaching. (See also Chapter 6, "Qualifications of School Health Personnel.")

Developing the health education curriculum

The development of useful curriculum guides should result from sound planning. Health instruction guides give security and direction to teachers; understanding and articulation between educational levels; balance and common learnings to students; and significance, purpose,

and understanding to the administration and citizens within the community.

A useful guide should be comprised of a general statement of an educational point of view, health education philosophy, health needs, objectives, scope and sequence of content, suggested student experiences (including teaching procedures), sources of materials, and suggestions for evaluation.

Implementing the planned instructional program in the curriculum and classrooms should be another team essential. The plan for action should be interpreted to the administration, to the total faculty, to the parents, and to the citizens at large.

Formulating health education objectives Individuals responsible for the health education program should formulate objectives for the program and for the learner in written form from a study of a point of view about health education, the individual and community health needs, and the legal provisions outlined in state school codes and the health and safety codes.[3] The individual health problems of students are identified from: school health service appraisals; growth and development characteristics; health education knowledge, attitudes, and practice tests and inventories; guidance and counseling findings; and the individual concerns and interests of students. Specific objectives are formulated so the student may gain essential scientific health attitudes and practices. The major objective, in keeping with *The Central Purpose of American Education,* is to enable the learner to think critically about health problems and to make reasoned judgments concerning individual, family, and community health.[4]

Developing the scope of instruction The health content, comprising the body of knowledge and thus the scope of the instructional program, should be derived from the identified needs, legal requirements, and objectives. The results are then translated into health education areas and/or concepts. These areas or concepts may be stated differently at the elementary level and at the secondary educational level. Or they may be defined similarly at these levels but given different emphasis. They may be planned on a spiral basis in which an area such as nutrition may be taught at the second, fifth, eighth, tenth, and twelfth grades guided by student interests and needs.

The following health education areas, presented as a composite list, are drawn from individual and community health needs, research studies, and the opinions of authorities in the field.

Community health Local, state, national work problems, program resources and services, personnel, community organization, and civilian defense

Consumer health Health products, health services including medical care, health advisers, health information

Dental health Dental health education: care, treatment, personnel, practices

Environmental health Home, community, and school

Exercise Physical activities, physical fitness, and recreation

Family health Family relationships, boy-girl relationships, sex education, preparation for marriage and parenthood

Health careers Vocational education on the more than 200 careers in the health field

Healthy body Growth and development including heredity, functions, and care

International health World Health Organization, World Medical Association, and others

Mental health Emotional and social health

Nutrition Food elements, selection, preparation, principles and practices

Personal health Individual health needs, attitudes, behavior

Prevention and control of diseases Communicable and chronic

Rest, sleep, relaxation, and leisure

Safety First aid and accident prevention in home, school, and community

Stimulants and depressants Alcohol, tobacco, dangerous drugs, and narcotics.

Modern health instruction incorporates "health concepts," the key ideas or thoughts pertaining to individual, family, and community health into each health instructional area. These concepts, carefully identified and selected, provide the structure for specific content to be taught.

Sequence of instruction The school should provide sequential health instruction from kindergarten through the twelfth grade, in junior colleges and in colleges and universities. The organization of instructional areas and "health concepts," arranged in proper progression along with student activities, establishes the sequence of instruction. The chief criterion for developing vertical sequence is a careful study and consideration of growth and development characteristics of children and youth or of developmental tasks.[5] An important part of curriculum sequence is good communication between educational levels. Each level should know what is being taught in the grades above and below it.

Another aspect of sequence is horizontal sequence, the planning of sequential information and experiences from the beginning to the end of a course or a unit of instruction. Such sequence depends upon the natural relationship of one health education area with another. For example, a study of mental health leads naturally into a study of family health, and nutrition leads logically into consumer health. Sound

planning is a prerequisite for establishing the proper sequence of health instruction.

Methodology An important element in successful health education is motivating students to assume individual responsibility for their own health. The teacher should use a variety of functional methods to provide meaningful experiences to bring about favorable changes in health behavior.

Authorities consider the following to be functional methods:

- Problem solving, projects, demonstrations, laboratory experimentation, lecture-discussion, providing new information, and moving a group ahead.
- Group work, such as committee or buzz groups, role-playing, audiovisual aids, creative activities, and field trips.

At the elementary and secondary levels, straight lecture or textbook methods, used as the chief teaching methods, are considered nonfunctional.

Problem solving is an effective approach to teaching when the goal is to change health behavior. The central purpose of education—to foster creative thinking and develop and use the rational powers of man—is best achieved through the problem solving method.[4] Thus, this method should be incorporated as one sound approach to health teaching.

Policies related to curriculum

There is no single method of incorporating health education into the curriculum; every opportunity for improving health behavior and strengthening understanding should be utilized. A well-organized school health program gives proper emphasis to formal classroom instruction as well as to the supplementary or integrated health education inherent in other subject matter areas. Cocurricular activities, auditorium programs, day-by-day healthful school living, and the experiences of pupils with school health services and community health projects all make their contribution to the health education program.

School health education may be organized according to the following patterns:

Health instruction The planned series of learning experiences deliberately incorporated into the curriculum and specifically designed and provided to influence student health understanding, attitudes, and behavior. Health instruction includes *direct health teaching* organized through a specified course for a semester or a year, or as a definite block of time appropriately placed and spaced to give continuity and sequence to health teaching.

Health instruction also includes *correlating* planned health units with other school subjects. Health education content and experiences

incorporated into biology or social science are examples. A third type of health instruction applies to the health concepts and experiences integrated into instructional cores or central themes forming the common health learnings of an *integrated* program. Instructional units organized around the "dairy" or "community helpers" in the elementary school program are illustrations.

Although the advantages of a concept approach to education have been demonstrated in many studies and the method has been used by skilled teachers for many years, widespread utilization seems to be limited. This is particularly true in the area of health education. Two current curriculum projects focus on the concept approach in health education. The first project is that undertaken by the Health Education Curriculum Commission of the American Association for Health, Physical Education, and Recreation (NEA).[6] The second project is the curriculum development experimentation conducted as the second phase of the School Health Education Study, a nationwide autonomous project supported by private funds under the guidance of a director and an interdisciplinary advisory committee.[7]

The Health Education Curriculum Commission plan of action was to identify the crucial health problems of the 60's and 70's relating to school-age children and youth and to determine basic health concepts related to these problems. The Commission, with the aid of special consultants, suggests some competencies that graduating high school seniors will need to meet the health problems of their time. The consultants contacted were experts in the specific areas of problems identified, such as fluoridation, medical economics, consumer health, and safety.

The writing team of the experimental curriculum development phase of the School Health Education Study identified the health needs of today, analyzed the structure of knowledge in health education, and developed a conceptual framework. Details relating to these concepts and their experimental use are available from the project director: Elena M. Sliepcevich, P.D.E., School Health Education Study, 1201 Sixteenth Street, N.W., Washington, D.C.

Health guidance A valuable, little-used approach and an important component of school health education, health guidance is the systematic assistance, aside from regular instruction, provided individual students by teachers, administrators, physicians, nurses, counselors, and others who are in direct contact with them. Health guidance aids the student to acquire knowledge and experience in solving immediate problems and to gain skill in solving future problems. Health guidance takes place when

- A physician discusses a health problem with a student during the medical examination
- A student comes to the health educator, physical educator or other teacher with a personal problem

- The nurse counsels a student about his total health record or about the results of his vision or hearing screening tests
- The counselor adapts the student's schedule or program to meet a particular health condition.

Health guidance is vital health education because the pupil has identified his problem. It has real meaning to him now, and, when his problem is solved, his life is enriched.

Incidental health education The informal type of health instruction which occurs when daily events stimulate student interest. These self-motivating experiences run the gamut of health education areas. They may arise from an accident, a health drive, a prevention activity (tuberculosis case-finding), a current event, a community health problem, a school survey of the environment, or other, similar experience.

Incidental health education may be changed into *systematic health instruction* providing another technique of education in a total school health program. This means carefully planning "teachable moments" when experiences take place which tend to occur regularly during a year's program. Planning health teaching activities to prevent accidents in the school, on the playground or athletic field, in the locker room or laboratory, and in going to and from school serve as examples.

Health instruction through correlation Ideally, health should be taught through a separate course and through correlation. When a separate course in health is not offered, planned correlation in other subjects is a step in the right direction. This plan correlates health education with other subject fields on both the junior high and senior high levels.

Experience has shown that a professionally qualified health coordinator is necessary for the success of such a program. If the staff does not include a health coordinator, the principal or curriculum director may act as coordinator. When health experiences, content, and materials are left to teachers of other areas, health education naturally takes a secondary place. It may even be omitted entirely. Health coordination requires the diligent, skillful, and cooperative work of the health coordinator to assure effective teaching and a comprehensive program. Sliepcevich and Carroll have presented an excellent guide for a correlated program including specific outline of content.[8] Even when a separate course of health education is included in the curriculum, much additional education can be offered by planned correlation.

Health instruction through integration The integrated plan has been discussed previously in relation to the elementary school program. In a broad field or in a core plan with a core course program, health education can be successfully planned and conducted. When the cores selected as the medium for organizating instruction pertain to the individual, the family, and the community, health becomes one of the vital integrating themes. For example, health education makes a major con-

tribution to cores such as "self-realization or self-development," "personal-social relations" or "community living."

Health education and physical education

Health education and physical education have certain common goals. To contribute to health is one objective of physical education. Another goal is to develop understanding and appreciation of the value of physical education and its contributions to growth and development and to healthful living. Health education and physical education are separate disciplines that have different content, activities, and teaching procedures. Each field should be planned and incorporated into the curriculum on the basis of its contribution to the needs of children and youth. Time allotment in the curriculum taken from one field to the detriment and at the expense of the other is not recommended. For example, a new health instruction program may be developed by taking blocks of time out of physical education for health education. If health education is an added course, it is recommended that a small amount of time be taken from each course in the curriculum—or an additional period added—rather than seriously reducing the effectiveness of one instructional field such as physical education. (See Chapter 4, "Health Aspects of Physical Education.")

Health education in college or university

Health education or health science should be an integral part of the general education program of the college or university. This health teaching should be built upon the elementary and secondary school programs providing for enrichment and study in depth of individual, family, and community health problems. A specific guide for college health education is outlined in the national conference report on this topic.[9]

Policies related to materials and facilities

Scientific health materials Materials and equipment should be up to date, appropriate for the grade level, safe, and adapted as needed. The accuracy of health content taught in the schools depends upon the scientific health information provided the teacher and the students through teaching materials. Because the scientific accuracy of content changes so rapidly in the health field, each teacher should have an individually selected plan for keeping up to date.

The interdisciplinary health education planning committee is an appropriate group to establish criteria for selecting health materials. This group should also evaluate textbooks and other teaching materials submitted to the schools, particularly those from commercial concerns.

All materials, especially texts and health series, should be up to date. A series should never be more than five years old.

Facilities and equipment Functional health teaching requires a modern classroom appropriately equipped for audiovisual instruction so that films and filmstrips may be shown. Many classrooms are being equipped for television, and schools are experimenting with programmed learning. Health education through television has proven successful at both the secondary and college levels. Models, charts, graphs, and laboratory demonstration tables are a few examples of useful equipment. Space for storage and for use of a variety of scientific materials should be allowed for teachers and students.

Time for health instruction

The time allotment for health instruction in a quality program should equal the time devoted to other instructional areas in the curriculum. Health teaching at the primary level is largely concerned with health and safety practices. At the upper elementary level less time is spent in health practice sessions, and more time is allotted to considering the reasons for desirable health atttiudes and practices.

At the junior high school level, health teaching should be in keeping with that scheduled for other academic areas. Recommended time allotment for the health education or health science course is one semester at the seventh grade and one semester at the ninth grade, or a year course at the eighth grade, or an equivalent plan. Many schools are trying marked changes in time schedules. Health education should have an important role in the new plans.

Time allotment for health instruction at the senior high school level also should be equal to that of other academic areas. A recommended plan is providing a semester course at the tenth grade with content primarily concerned with individual and family health, and a semester course at the eleventh or twelfth grade focused on family health and community health problems. An equivalent schedule should be adopted for schools using an 8-4-4 plan.

A minimum program consists of definite *blocks of time* arranged for direct health instruction. For example, two ten-week blocks of time are arranged at the junior high school level, one at the seventh grade and another at the eighth or ninth grade. Similarly, at the high school level, a ten-week block of time is organized at the tenth grade and a second one at the eleventh or twelfth grade. The block-of-time plan for direct instruction is considered to be a temporary plan that enables a school or school district to initiate a program and then develop it into the separate course plan.

Evaluation of school health education

Evaluation is necessary to determine the effectiveness of the health education program. Modern evaluation calls for three types of appraisals based on three sets of objectives. With objectives established

for health knowledge, health attitudes, and health practices, progress should be assessed in relation to these objectives. Most significant to evaluating the effectiveness of health education is the gathering of evidence of desirable health behavior on the part of students and later in their families. Evidence of changes or new desirable practices may be apparent at the end of the instructional period. However, the effect of instruction on some attitudes and practices may not be apparent until students become alumni and citizens in the community. Delayed appraisals are necessary to assess the total effect of health education.

Evidence of students' knowledge gained may be obtained through written tests. If problem-solving procedures are used, problem-solving tests developed by the teacher—or by the teacher and students—should be utilized. Appraising health attitudes and health practices is difficult but essential. Some clues can be obtained through standardized health attitude scales and health practice inventories. Other evidence can be gathered by such procedures as teacher observations, observations by classmates and parents, anecdotal records, appraisal of classwork and projects, reports of interviews and field trips, and before-and-after photographs.

A second type of evaluation is that concerned with appraising the health education program against established standards, such as those prepared by the American Association for Health, Physical Education, and Recreation. *Criteria for Evaluating the Elementary School, Junior High School and Four Year and the Senior High School Program,* published by the California State Department of Education, Sacramento, and *Administrator's Check List: School Health Program Essentials* from Visalia, California, are examples of evaluative criteria for health education available from some state departments of education. Such evaluation forms may be devised by a local school district to meet its own situation.

A third type of evaluation is of the appraisal process itself. This might be convenient, for example, when the school health council, committee, or subcommittee plans to evaluate a health instruction program. It is most appropriate to schedule a discussion period to consider orally how effectively each member felt the process of evaluation was carried out. This is a subjective procedure for determining the strengths and weaknesses of the process. It provides data as to how the evaluation process may be improved in future appraisals. Such self-appraisals of the process make possible a list of priorities which can be used as goals for the next year's evaluation. Since evaluation is a continuous process, it should become an integral part of the health education program.

Summary

Health education in elementary and secondary schools, colleges, and universities provides the essential scientfic health knowledge and prin-

ciples and practices for healthful living. These programs are academic in nature and are vital components of the administrative pattern and the curriculum at each educational level. They should be cooperatively planned and implemented. Their basis and foundation are the individual needs of children and youth and the health problems of the community. Objectives should be formulated so that the health behavioral changes will be the outcome of instruction.

The scope of health education should include the categories of individual, family, and community health appropriately organized into instructional areas. Specific health concepts should be identified for each area and properly placed by educational level and grade. Teaching methods, procedures, and techniques should be functional in nature to provide opportunities for meaningful experiences so that the lives of students are enriched. Effective instruction also depends upon the proper use of scientific health materials and the availability of well-equipped classrooms and health facilities.

Evaluation should be an integral part of the program to assess student achievement, in terms of knowledge, attitudes, and practices; program activities; and the appraisal process itself. School health education should be a foundation for action programs in the community by providing a health-educated school population. Members of this group will then be equipped to deal wisely with their own and their families' health problems and should provide a scource of adult leadership for future community health problems.

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2. School Health Services

THE IDEAL school health service program is based on accepted standards and is adapted to a particular community. It is influenced by local customs, the variety of professional personnel and other resources available, and the local awareness of the health needs of children and youth. Health services are designed to protect pupil health and to aid each child to reach and to maintain his best possible state of well-being.

Policies related to four important aspects of school health services will be considered:

- Health appraisal
- Health counseling and interpretation
- Emergency care for injury and sudden illness
- Communicable disease prevention and control.

Health appraisal

To meet the educational and health needs of children and youth, it is essential to secure information concerning their physical, mental, and emotional condition. Such information may be obtained through inquiries of parents and pupils, from observation and screening by school personnel, and health examination by professional personnel. Examination of pupils should be performed by the child's personal or family physician or by physicians in the clinic or other health service facility that normally provides the child's medical care. Physicians associated with the school or health department may be used when a private physician's services are not available.

Continuous observation Observation of the appearance and behavior of children is the responsibility of all who see them. It begins with prenatal care of the mother and continues through life. The results may be found in the records of physicians, parents, dentists, and well-child clinics. The health history of a child as found in school in the cumulative health record becomes a continuous record of the development of the pupil as observed by many people.

Continuity of health histories is enhanced whenever information is noted in school records that can be used by the pupil's physician and dentist, parents, classroom teachers, the nurse serving the school, guidance counselors, social workers, and other personnel. Ideally all observations are brought into focus by the medical examination.

Teacher observation Good teachers are skilled observers of children because they understand the way children grow and develop. Teachers are in a strategic position to note changes in pupils' appear-

ance and behavior related to both physical and emotional health. They have the advantage of seeing children in relation to each other as well as the opportunity to observe individual changes. If a teacher suspects a health problem in a child despite recent examination, her observations should be seriously weighed since seemingly insignificant observations may lead to the discovery of previously undetected conditions needing treatment.

Each school, using the health resources of the community, should provide in-service courses in child growth and development with attention to improving teacher skills in health observation.

A system of communication between teachers will improve their individual observations and promote earlier referral for diagnosis, treatment, and possible modification of home and school regimes. This is particularly important at the secondary school level when each youth has several teachers. Sharing health records facilitates this exchange of information. Utilizing teacher-nurse conferences enables teachers to place their observations in the hands of school health service personnel for evaluation and needed action.

Screening Tests Screening tests often are conducted by teachers, nurses, or technicians. Volunteers are used under the supervision of the physician, nurse, or other health service personnel. Screening procedures should be in accord with standards recommended by the local medical society, health department, or appropriate physicians in the community. Detection of any health deviation is of value only so far as it leads to remedial care.

The screening tests most commonly used are those for measuring growth and for determining acuity of vision and hearing. The purposes of all screening procedures are to secure a better understanding of the pupil, help him attain greater physical effectiveness, and increase his understanding of ways to live healthfully. These can be achieved only by appropriate follow-up.

Measurements of height and weight not only provide information concerning growth, but also serve to motivate instruction relating to growth, including variations due to sex and age and the individuality of growth patterns. A minimum of three height and weight determinations during each school year is recommended. These are best noted on one of several available growth charts.[1-3] Each school should consult with its medical advisor and adopt the record form that best meets local needs. The charts become part of pupils' cumulative health records.

Vision screening is the responsibility of school health personnel rather than practitioners from the community since its purpose is to establish a basis for referral and not to provide definitive diagnosis. A Snellen test should be made as early as three years and repeated at intervals of two or three years in elementary and secondary schools.

When given by the teacher or other person trained in the technique of vision testing and supplemented by continuous observations of pupils' appearance and behavior, the majority of those needing eye care will be detected.

Other screening tests are worthy of consideration.[4] A screening test for color deficiency should be given once before a child completes the elementary grades and begins to think about vocational possibilities. Some schools have added the plus sphere test or one of several varieties of stereopticon devices for screening purposes to detect hyperopia. These vision screening tests should be included only on the recommendation of physician consultants.

Hearing tests should be given yearly in elementary schools and every two years in secondary schools, preferably with a puretone (discrete frequency) audiometer.[5] Only teachers, nurses, or technicians with special preparation should give audiometer tests.

Under certain circumstances local medical and public health authorities may recommend other screening tests. These may include blood tests, urinalysis, skin tests for tuberculosis, photofluoroscopy, and stool examinations for parasites. Most of these require the services of skilled technicians.

Medical examinations Two distinct types of medical examinations are conducted. Periodic medical examinations are used as a part of the health appraisal of apparently normal and healthy individuals and include the examinations of those who participate in intramural or varsity sports and games. *Referral examinations* provide an opportunity for the physician to check reported deviations from normal health.

Periodic medical examinations are best performed by the pupil's personal physician. A more thorough appraisal can be made in the private physician's office and continuity of medical contact is maintained. Whether the examination is done in the physician's office or at school, the young child should be examined in the presence of a parent. The health history of the pupil's early life can then be made available or clarified, and the parent can be given first hand recommendations for needed care. The results of all screening tests and teacher observations should be recorded on the health record before the physician performs the pupil's health examination. The findings from these reports plus the information from the parent produces a more comprehensive evaluation of well-being. When a need for care is disclosed, it may be initiated immediately by the physician. The physician will explain to the parents the importance of early follow-up. When necessary, other school health personnel will also participate in the follow-up procedures.

Periodic health examinations, although limited in scope, aid in evaluating the child's ability to make satisfactory progress. A worthwhile examination requires sufficient time; it is recommended that an average of fifteen minutes be devoted to each examination and needed

counseling. If conditions are found which require referral for specific purposes or which suggest the need for individual adaptation of the school program or restriction of physical activity, additional time may be needed.

During their school years, pupils should have a minimum of four periodic medical examinations: at the time of entrance to school, and at approximately the fourth, seventh, and tenth grades. Additional examinations should be made whenever observations indicate. Local decisions should determine the number of periodic examinations, taking into consideration available medical manpower.

Although some support the view that annual examinations are not justified, some states require them by law, and most states require them for sports participation. Fewer examinations of good quality coupled with time for instruction and counsel are usually considered preferable to frequent complete coverage of the school resulting in inadequate examinations that are medically and educationally unsound.

Medical examinations, in addition to providing the information to guide school personnel in the proper counseling of the pupil, should be sufficiently personalized to provide a desirable educational experience for the student.

The seasonal pressure of many examinations at or near the fall opening of school can be relieved where schools and physicians are able to agree on a system of priority scheduling. Athletic teams need early attention; however, first priority should always include referral examinations for clarification of suspected health problems. Periodic medical examinations can be distributed through the school year to use available physician time effectively. Again it should be stressed that health appraisal is of value only as it leads to remedial care.

Dental health and dental examinations Regular visits to the dentist for examination and treatment are necessary for the prevention and control of dental diseases. The school, therefore, should encourage every pupil to visit his dentist at least once a year for an examination and correction of defects that are found. Some pupils require more frequent visits for maintenance of dental health. The frequency of visits can best be determined by the pupil's own dentist. A definite policy regarding excuses for dental appointments during school hours should be established through conferences with the local dental society.

Dental inspections, as differentiated from dental examinations, may be provided from time to time as an adjunct to other phases of the school health program. School dental inspections should be made by a dentist or dental hygienist, using mouth mirror and explorer. The routine use of such inspections as a substitute for complete dental examination by one's personal dentist is not an acceptable procedure.

Studies show that the addition of fluoride to the community water supply has prevented up to 65 per cent of the expected tooth decay. School authorities should encourage the fluoridation of public water

supplies as a means of reducing dental caries. Where fluoridation has not been instituted, partial protection against dental decay can be provided by professional application of a fluoride solution directly to the teeth. Fluoride supplements are sometimes prescribed by dentists or physicians when no other method of obtaining this benefit is available. The effectiveness of this method, of course, depends on parents' assuming responsibility for consistent regular dosage.

Psychological and social evaluation The physical health of pupils is affected by the emotional and social relationships which they have in their homes, with their peers, and with faculty and staff.

Close cooperation between psychologists and social workers, concerned primarily with mental health and behavior, and physicians and nurses is essential to effective service for the pupils.

When extensive psychological examinations are needed they should be administered by an adequately organized child guidance service. When emotional difficulties or emotional disease are involved, medical supervision and psychiatric consultation are essential. The recent development of mental health centers is supplying schools in some areas with a helpful health service.

The teamwork of the several persons concerned with the total health and personality development of the child should lead to a proper adjustment of the school program to the pupil's needs and help him to adjust to school life. Parental cooperation should be encouraged since more effective results are obtained when the child is supported by home and school simultaneously.

Health records A suitable record form for assembling the accumulated data and opinions about a pupil's health is an essential part of the school's file of total information about each pupil. A health record should incorporate the developmental approach and contain significant information from parents, teacher observations, results of screening tests, physician's findings and recommendations, dentist's reports, nurse's observations, the findings of psychologists, the reports of social workers, occasional scores from physical performance tests, and any other pertinent information regarding a pupil.

The record should be cumulative from grade to grade and follow the child from school to school as does his scholastic record. Several states have uniform health records to facilitate transfer of information when pupils move to other schools or progress to higher grades. To be effective, a cumulative health record must be up to date, contain objective data rather than subjective opinion, and, although confidential, be available for proper use. Written policies should govern who may see the record and where and how it should be filed.

A record is of little value unless used. It is a basic reference and serves as the focal point on which all communications about pupil

health between teacher, parents, physician, dentist, and nurse are centered. It is also valuable to the physician dealing with any physical or emotional illness affecting the pupil. A group analysis of records may also be used as a basis of certain aspects of health education.

Health counseling and interpretation

Interpretation to parents and pupils Parents should be acquainted with the reported health needs of their children to aid them in seeking needed medical care, in planning diets, making alterations in daily routine, and taking other necessary steps for improving the child's health. Therefore, the school should regularly report to parents their observations about the pupil's health status. Serious deviations should be reported to parents immediately. Time should be budgeted for periodic conferences between parents, the teacher, school physician, nurse, or other qualified health service personnel to discuss the child's health needs. If parents do not attend parent-school conferences, other means, such as visiting the home, should be used to notify them of the health status of their children.

A pupil who is old enough to assume some responsibility for the protection of his own health should be helped to understand the meaning of his health record. The interpretation should be presented in a way that will help the pupil understand his needs and want to change faulty health habits or practices, seek correction for remediable defects or handicaps, and overcome unhealthy personal problems, such as malnutrition or abnormal weight. A pupil should know when he needs medical and dental care and why as well as how to obtain it. Of course, this must be done with parental sanction until the pupil is largely on his own.

Helping pupils secure treatment or other needed attention for health problems identified by health appraisal procedures is a most important aspect of school health services.

Interpretation to teachers A teacher who is informed about the health status of his pupils can better adjust the school program to the student's needs and encourage parents to obtain correction of remediable conditions recommended by the physician and/or dentist.

In order to effectively observe his pupils, the teacher must be continuously informed of the health status of each child. The proper interpretation of individual health needs is a matter demanding professional skill and judgment. The nurse, working in close cooperation with the school physician, is well qualified to do this job. Her skills are especially useful in the teacher-nurse conferences which should be scheduled regularly.

School personnel, when engaged in health guidance, should not attempt to diagnose diseases or to suggest diagnoses to pupils or par-

ents, nor should they attempt to select a specific physician or dentist for a pupil or his family. Parents can and should obtain the name of qualified professional people from local medical and dental societies.

Physician-school interpretation A school may properly expect that all community resources, such as specialized medical and dental consultation of a diagnostic nature, will be made available to pupils. When resources outside the school system are utilized (whether private physicians or dentists, public clinics, or voluntary agencies), efficient liaison arrangements should be made by the school with the consent of the child's parent or guardian. In particular, full provision should be made for exchange of pertinent information among the school, the home, and cooperating individuals or agencies.

Frequently the school program must be changed to meet the physician's wishes in the interest of the pupil. Consultation between appropriate representatives of the school and the pupil's personal physician will promote mutual understandings that can accomplish the physician's wishes for his patient without disruption of smooth school administration.

Utilizing community resources Follow-up involves utilization of all community resources. Community action sometimes is necessary in developing resources to meet the needs of all children. Leadership for such action should be provided cooperatively by the local medical and dental societies, the schools, and the health department. It may be necessary to seek help from voluntary organizations or from county, state, or federal agencies.

Special problems arise with children whose parents are financially unable or are unwilling to provide medical, dental, or other specialized care. The school should help such parents secure care for the child through existing community agencies. Persistent willful neglect should be reported to an appropriate child welfare agency. The courts can order treatment when parents are unable or unwilling to provide it.

Communication Little communication about the health of pupils can take place between teacher and nurse, between either and the parent, or between the physician and any school personnel unless such exchange is recognized as acceptable practice, and channels for it are established by administrative action. School personnel have much helpful information for the physician concerned with a child's problems. The physician's recommendations, incorporated by educators into the activities of a school day, can have a positive effect on a child's health status and educational progress. The parent, who is primarily responsible for the child's health and welfare, is the center of this information exchange. Except in unusual circumstances, it is preferable that the school communicate with a child's physician through his parents.

Emergency care for injury and sudden illness

Every school should have a planned written program related to emergencies. The school has responsibility for giving immediate care in case of accident or sudden illness as well as for notifying parents, for getting children home or to some other place of safety, and for guiding parents, where necessary, to sources of treatment.

Giving immediate care Ideally, everyone on the school staff should be able to administer basic first aid. As a minimum standard, at least three persons trained in first aid—teachers or members of the office staff—should be available at all times in each building. Teachers and staff members associated with such hazardous areas of the school as the gymnasiums, industrial art facilities, laboratories, homemaking rooms, and playing fields must be qualified in first aid.

First aid supplies are most accessible when divided into several kits stored at the places of most probable use. The content of first aid kits should be designed with the advice of the school medical adviser to meet anticipated needs.

Teachers and other school personnel are expected to limit themselves to the usual and accepted practices of first aid in managing emergencies due to sickness or accident. They should not diagnose illness or administer medication of any sort unless directed to do so by a physician.

The school medical adviser and the school administrator, with the cooperation of the local medical and dental societies and appropriate health service personnel and teachers, should prepare detailed instructions or "standing orders" for sudden illness or emergency. These directions plus the school board's decisions on handling situations when religious beliefs are in conflict should be known to all school personnel.

Informing parents Parents should be notified of their child's accident or sudden illness. If possible, they should be summoned by telephone. Where the emergency is so grave as to suggest the need for immediate hospital care (for example, suspected skull fracture or appendicitis), there should be no delay in securing medical attention, through a public institution if necessary.

The names and phone numbers of the pupil's personal physician and dentist and the name of the hospital preferred by the family should be readily accessible. Many schools include the name of a second physician acceptable to the pupil's parents, while others maintain a list of physicians quickly obtainable, among whom may be the school physician. These may be called to care for pupils for whom no personal physician has been designated.

Helping parents The member of the school staff who notifies a parent of a child's sickness or injury should be prepared to help an

uncertain parent decide what is to be done for the child. He should know what treatment facilities, public and private, are available in the community and be able to guide the parent to these facilities.

Pupils may be protected by group accident insurance policies. Parents should be informed about such insurance so that they may use it effectively while not expecting more than has been purchased with the premium.

Communicable disease prevention and control

The prevention and control of communicable disease requires coordination between activities of medical societies, health departments, practicing physicians, parents, schools, and hospitals.

Community control of communicable disease is the special and legally designated responsibility of the health department. All policies relating to control of communicable disease apply to school personnel as well as pupils. School personnel should solicit and follow health department recommendations. In communities lacking public health personnel, the school should seek guidance from the state health department and the state or local medical society.

The local health department will supply schools with a list of communicable diseases which are legally reportable, copies of official regulations concerning isolation, quarantine, and exclusion from school, and information regarding signs and symptoms which should cause school personnel to suspect a reportable disease. The schools and physicians should have a plan that assures following the law on reporting the diseases.

It is recommended that the health departments frequently send periodic reports to schools on the prevalance and distribution of reportable communicable diseases.

There should be written local policies for control of nonreportable communicable diseases such as conjunctivitis, impetigo, scabies, ringworm, and the common cold.

Immunization against certain communicable diseases, such as smallpox, diphtheria, tetanus, whooping cough, poliomyelitis, measles and, under certain conditions, immunization against mumps and influenza should be encouraged. Schools share responsibility for educating parents and children regarding the value of such measures and for emphasizing that most primary immunizations should be carried out in early infancy. Booster injections and revaccination should be administered at appropriate intervals as recommended by local authorities throughout infancy and childhood and, in some cases, into adult life. Specific preventive treatments are best administered by the personal physician or by the usual source of medical care in conjunction with the early supervision of a child's health.

School personnel should make certain that the information they present on immunization coincides with the consensus of local medical and public health opinion. School health policies should be developed through consultation with the medical society and the health department.

Many schools notify parents of all children in a classroom when one of the children has been diagnosed as having a contagious disease. Appropriate preventive treatment then can be instituted.

The common cold is an especially difficult communicable disease problem. Although it is impractical to exclude from school every pupil who exhibits signs and symptoms of a common cold, some measures for control can be adopted. The school should encourage parents to keep pupils home when they have a cold because what seems to be a cold may be the early stage of some more serious illness and because it helps control the spread of disease.

Avoiding undue emphasis on attendance The control of communicable disease in schools is sometimes hampered by the false emphasis on perfect or near-perfect attendance. Pupils should be commended for protecting the health of their classmates as well as practicing good health habits when they remain home while ill.

Exclusion and readmission policies based on these principles and local communicable disease regulations should be developed jointly by representatives of the school system, health department, and medical and dental associations. Most communicable diseases of children are not communicable after a specified number of days; a health officer's readmission authority is not needed if the specified time has elapsed since first symptoms. However, children having diseases that require laboratory procedures to determine if they still are communicable are readmitted to school only upon recommendation of the health department. Generally a physician's readmission authority should be used following illnesses of more than three days and then primarily to assure that the pupil will not be harmed by resuming his school activities.

Allotment of state funds to local schools on the basis of the average number of pupils in daily attendance sometimes encourages attendance of pupils who should not be in school. Some method should be devised to enable such children to remain out of school without sacrificing this source of school funds.

The decision regarding the closing of schools when epidemics occur or threaten should be made locally on the basis of conditions in a given community. The school faces the dilemma of whether to open school or to extend the vacation when epidemic conditions exist in a community at the time school should start in the fall. Minimum exposure of susceptible persons to those with potential infection is the main objective to consider. Community facilities as well as the social patterns of children and youth should enter into the decision. A week

or two of delay in opening school sometimes may be helpful in reducing incidence of a prevalent disease.

Although a health department has legal authority to close a school during a serious epidemic, it should take such action only after consultation with a school administrator.

Certain health services for needy preschool and school-age children recently have been made available through government funds. The Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, in considering the availability of government funds for deprived groups, suggested in a resolution:

WHEREAS a variety of new legislative proposals affecting the health of children and youth are being enacted, and

WHEREAS implementation of the provisions of this legislation will involve specific policies and practices relating to health services and health education of children and youth, and

WHEREAS the Joint Committee on Health Problems in Education in conjunction with other groups has suggested educationally desirable and medically acceptable policies and practices in conducting school health education and health services, and

WHEREAS these policies and practices have emphasized the concept of the individual's responsibility for his own health and the concept of a personal physician, and

WHEREAS these policies and practices have evolved through years of experience and have generally been found workable and effective in actual practice, therefore, be it

Resolved, That these policies should guide the implementation of any new legislation affecting health services for children and youth.[6]

References

1) Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association: *Height Weight Interpretation Folder for Boys,* Meredith, H.V., and Knott, V. B., Washington, D.C. and Chicago: The Associations, 1964

2) *Height Weight Interpretation Folder for Girls.* See Above.

3) *Wetzel Grid for Evaluating Physical Fitness,* Cleveland: Newspaper Enterprise Associates, Inc.

4) Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association: *School Health Services,* ed 2, Wilson, C. C. (ed), Washington, D.C., and Chicago: The Associations, 1964, pp 71-90

5) Ibid, pp 93-109

6) *Legislation and School Health Policies,* resolution adopted by the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, March 1965

3. Healthful School Living

> HEALTHFUL school living . . . embraces all efforts to provide at school physical, emotional, and social conditions which are beneficial to the health and safety of pupils. It includes the provision of a safe and healthful physical environment, the organization of a healthful school day, and the establishment of interpersonal relationships favorable to mental health.[1]

Every school administrator has responsibility for safeguarding the health of children by providing wholesome physical conditions with appropriate attention to lighting, heating, ventilation, acoustics, equipment, and housekeeping practices. Provisions must be made for safe water and waste disposal and for food service where required. In addition, a school day should be organized so as to promote group action and development as well as individual growth, to foster democratic relationships, and to protect pupils from excessive curricular and extracurricular pressures. Such planning should provide adequate time for food, relaxation, exercise, and recreation as well as for study.

A safe and healthful physical environment

Regulations which require children to attend school imply a responsibility shared by parents, school personnel, and community health authorities to provide an environment conducive to optimum growth, health, and learning. Pupils themselves can be helped to recognize healthful living as a goal to be attained. The environment should be maintained and used by school personnel and pupils so that it will contribute to health education.

Building construction School buildings should provide an environment that encourages good teaching, permits healthful practices, and protects health. Facilities should be adapted to the ages of the children and the program of instruction. Plans for new buildings generally are approved by state departments of education and departments of health.

Considerations in the selection of a site include: present and projected pupil population; surface drainage; impending industrial or highway developments; distances involving transportation; and size adequate for playgrounds, athletic fields, parking, and landscaping. New buildings are designed by a school architect with the help of a representative advisory committee of school personnel; community

leaders; consultants from state and local groups; and experts in such specialized fields as safety, sanitation, lighting, heating, and ventilation.

Safety The school is obligated to promote the safety and well-being of pupils in classrooms, corridors, cafeterias, laboratories, and gymnasiums as well as in buses and on playing fields. The school and other community agencies interested in safety need to work as a team if safety measures are to be effective. For example, fire and police departments share responsibility with the school for certain safety procedures. Many other agencies supply valuable resource material and personnel in developing the school safety programs.

The school administrator or someone appointed by him should assume direction of the school safety program.[2] This program should include regular and thorough inspections of the school plant to identify accident hazards and to determine the degree to which safety measures are being carried out. Best results are obtained through use of a checklist prepared in advance, listing the items to be inspected and the standards by which they will be judged. Analyses of accident reports provide information showing where accidents occur most often.

Although no single measure will prevent all accidents, capable, intelligent supervision of pupil activities is most helpful. Physical education teachers and athletic coaches should study their facilities and program to eliminate hazards and establish procedures designed to prevent accidents. Apparatus and physical education facilities should be continually inspected for safety and given periodic special attention. Suitable protective equipment should be provided. Pupils need instruction in ways to protect themselves and others while participating in sports activities. Industrial arts instructors should require that machines be provided with adequate guards and that pupils wear proper clothing, including safety goggles. They should make certain that pupils are thoroughly familiar with and practice the safe use of tools and machines. Similarly, instructors in science, art, and homemaking laboratories need to teach the safe use of equipment and be alert to the special hazards related to them. Learning the proper use of school facilities is an important aspect of education. With the rapid development of new machines, equipment, and materials, instructors should receive proper directions for safe operation of the equipment.

Major disasters are infrequent, but they can occur at any time. All school personnel need to be familiar with fire safety procedures including the roles of principals, teachers, and custodians; with plans for checking fire alarm systems, fire extinguishers, and fire exits; with inspections to reduce fire hazards; and with the conduct of fire evacuation drills. School authorities should consult with appropriate community groups or officials in making realistic plans for meeting disaster situations. An annual review of disaster plans should be made.

Lighting and acoustics The use of professional consultation is necessary to provide adequate lighting and proper acoustics to help make school buildings pleasant, safe, and effective places of learning. Attention to lighting and acoustics is desirable as a means of facilitating learning. These environmental conditions also directly and indirectly affect health. Inadequate light can also be a contributing cause of accidents.

Noise may be annoying or distracting; it may cause anxiety or lead to irritation and fatigue. The acoustical design of a school building should include attention to the site and the proper location of buildings on the site; the interrelationship of various parts of the building; the size and shape of classrooms; and proper acoustical treatment of auditoriums, libraries, music rooms, gymnasiums, cafeterias, and corridors. The services of an acoustical engineer are essential when planning new buildings or improving old buildings.

Heating and ventilation The condition of air in a classroom significantly influences health and learning. Learning is facilitated when the air of classrooms is kept at a comfortable temperature and free of unpleasant odors. Air temperature is affected by the type of heat, the humidity of the air, the air movement, the amount of direct sunlight, and the nature of the physical activity of students. Thus, classrooms, gymnasiums, corridors, libraries, and auditoriums may present different heating and ventilating problems. Specialized knowledge and skill are necessary in designing effective heating and ventilating systems for modern schools.[3]

Water supply and waste disposal It is evident that a safe and adequate water supply is a health factor of great importance to the health of pupils. The sanitary disposal of wastes is equally essential. In urban areas, the responsibility for the provision of safe water and the sanitary disposal of sewage is easily met by securing water from the community water system and utilizing the existing sewage system. In other areas, the school board often must provide for an independent school water supply and a waste disposal system. A school with its own water supply should add the proper amount of fluoride to give the benefits of fluoridation to school children. State and local health departments can provide qualified personnel to insure the desirable location and construction of necessary wells, water distribution, and waste disposal systems.

The design of an adequate plumbing system and the provision of drinking fountains and washing and toilet fixtures of the proper type, size, height, and number require the services of a competent engineer with appropriate experience, as well as the advice and approval of state and local departments of health and education having jurisdic-

tion. Unless suitable facilities exist, teachers are handicapped in teaching the principles of personal health. Pupils attending a school which is well equipped with handwashing and toilet facilities and drinking fountains can be better expected to learn to use them in a sanitary manner. In this way adequate equipment serves as a valuable aid in teaching desirable health practices.

School climate Teachers, pupils, and custodians all have a share in creating a favorable environment for learning. Pupils who are proud of their school leave classrooms neat and orderly at the end of the day and keep corridors and toilet rooms free of waste paper and walls unmarred by smudges and pencil markings. Lawns and play areas are tidy. Making and keeping the environment clean, safe, and attractive is an important part of teaching.

Good housekeeping is so important to the welfare of pupils and to the whole learning process that it is imperative that well-trained custodial personnel be employed and supplied with suitable equipment and essential cleaning supplies. Custodians need to understand the principles of sanitation, of safety, of fire prevention, and how to cooperate with teachers and pupils. Many school systems offer a continuous series of workshops dealing with various aspects of custodial work or take advantage of courses offered elsewhere so that a competent custodial staff is developed and maintained.

School food service Properly organized and directed, a school food program plays an important part in healthful school living. Enjoying wholesome food in pleasant surroundings is an important educative process as well as a contributing factor to the health and learning ability of children.

School food programs operate under policies adopted by the board of education and the school administrator. Policies relating to the type of management, employment and personnel practices, finances, scheduling of eating periods, and provisions for supervision are needed. As an accepted part of the total school program, school food service should be available to all pupils and school personnel.

A number of aspects of the program require special attention, such as provision of time for handwashing before eating; scheduling which permits adequate time to eat in an unhurried manner; nutrition education which will encourage pupils to take full advantage of menus offered; provision of pleasant and adequate space for eating; a kitchen and serving area equipped to prepare and serve food in a sanitary manner; and the selection of a competent director of food service. Advice on these matters can be obtained from the local and state health and education authorities and from the school medical advisor.

Academic and social factors for healthful living

Academic and social pressures In a resolution concerning pressures on children to achieve, the Joint Committee on Health Problems in Education of the NEA and the AMA stated approval of attempts

> . . . to bring children up to their full learning potential but urges (that) such attempts . . . be on an individual basis. Consideration of the realistic expectations in the child's school day, as well as family and community demands, should be made in order to avoid excess pressures. The Committee further recommends a more accurate individual evaluation of each child through early observation, medical and emotional appraisal, and continuing consultation with parents.[4]

Some girls and boys jeopardize their health by excessive participation in clubs, organizations, athletics, dramatic productions, publications, music groups, extracurricular lessons of various types, and a multitude of social and community activities. While participation in extra class activities is highly desirable, all of these should be evaluated in terms of the best interests of the participant. Teachers and other school personnel have a responsibility to discuss the desirability of such evaluation with pupils and their parents.

Numerous factors in school organization affect the health of pupils. Some of these are the length of the school day and year, reporting pupil progress, pupil grouping, schedules, homework, and other regulations.

The school day and year The trend toward lengthening the school day is based on consideration of such factors as differing individual academic and health needs, the value of a variety of activities, the difference in fatigue levels of various age groups, the general health needs of all students as affected by the length of time spent in traveling to and from school, the school facilities, the faculty load, and the extracurricular offerings. As a result, some first graders go to school three hours per day while others attend for four or five hours. Many elementary schools include later afternoon recreation. Many bus routes have been shortened. Some schools have added breakfast for early risers. Attention is being given to the length of the school year and the alternation of vacation periods with periods of work without regard for the traditional plan of the nine- or ten-month school year.

All school schedules should be examined in light of their effect on the emotional and physical health of students as well as on the worth of activities offered.

Reporting pupil progress Both physical and emotional health are affected when pupils are exposed by parents or school personnel to

pressures for achievement which are unrealistic in terms of their abilities. Conversely, failure to challenge gifted girls and boys sufficiently may result in indolence and frustration.

Appraising pupil progress and reporting to parents is one of the most complex problems in education. There are various patterns of thought on the matter. One group supports the concept that a grade should indicate sheer academic achievement. They point to college entrance applications asking for grades indicating academic achievement. They also point out that students want to know "where they stand." This kind of marking seems relatively simple and has tradition to insure adult understanding. However, the teacher responsible for determining the academic achievement grade must decide whether this grade is in comparison to achievement in a given class, to all students in comparable courses in the school, or to national standards. After a teacher has experience and has time to know a student, he can make a relatively fair estimate of a student's standing compared to the average for his level in school.

Other groups believe that since pupils do not mature at the same rate, they should not be expected to reach the same level of achievement at a given age. As a result, grades should be based, in the main, on individual achievement. Many compromise solutions have been suggested and tested.

Even though there is no one answer to this problem, a few basic policies emerge. The school with wise consultation should determine what philosophy is to prevail. The student and the parents have the right to know and the obligation to seek an understanding of the meaning of the grades used. Schools filling college application blanks should interpret their grading system to the college in an explanatory paragraph.

Records should be used carefully by parents and teachers. Marks are a measure of progress in the acquiring of an education. They do not measure a student's personal worth nor his love and respect for parents. For one individual student, marks may seem to indicate no hope; to another, they may indicate little need to study since he may feel that he is "perfect" anyway. Using grades for exactly what they are encourages an individual to face reality and to get to know himself.

Pupil grouping and schedules The size of a school, the size of classes, and the grouping of pupils within classes can influence pupil health. The way a school is organized to meet individual needs is more important than the mere fact of numbers. When large enrollments are unavoidable, attempts can be made to group pupils within a school. If classes larger than 30 pupils are necessary, the resulting disadvantages may be partially offset at least by improved staff organization and services and by new and more effective methods of instruction.

The practice of grouping pupils according to ability and other categories has some negative aspects when related to social and emotional development. Grouping practices need intensive study by parents and school personnel to arrive at procedures which will best meet developmental needs of boys and girls.

Pupils' schedules are determined in part by the organizational pattern of the school. In the elementary school particularly, sedentary and active types of learning should be alternated to allow boys and girls frequent changes in position and activity. At all levels, pupils should be allowed freedom commensurate with their ability to accept responsibility and opportunities to share in individual and group planning and evaluation projects.

Homework The grade in which homework should be begun and the amount to be assigned are controversial issues. When assignments are made, pupils should understand what is to be done and how it relates to class work. In addition, home conditions and obligations should be considered. All pupils have need for recreation, for participation in community and religious activities, and for assisting with work at home. Massive assignments over the weekend or on scheduled holidays are seldom justified. Occasional relief from all class chores is good for teacher and pupil alike.

Today's emphasis on "academic achievement" and "pursuit of excellence" tend to put pressures on students that are harmful to mental and emotional health. Schools must continually recognize this as a factor for healthful living.

The influence of school personnel on the emotional and social environment

The teacher A friendly person who knows and understands himself reasonably well is more likely to be a successful teacher than a person who does not. Such a person is secure enough to be objective about pupil behavior. His physical health is important, as are his attitudes toward his personal and professional goals.[5] School administrators can work to promote the emotional health of teachers through maintaining a healthy environment. The provision of job security for successful teachers, a balanced work load, adequate salary and retirement scales, provision for sick leave, opportunity for professional advancement, and constructive supervision are a few suggested employee benefits worth consideration. Teacher morale is often improved by discussion groups, case conferences, individual counseling, help with troubled children, and relief from extra clerical and monitoring duties.

An effective teacher has a knowledge of the growth characteristics of each age group; considers each pupil's capabilities, interests and achievements; is familiar with the home background of students; and

is aware of any unsual health conditions requiring special consideration. He has well-defined educational goals and so manages the class that students gradually develop interest, knowledge, and self-discipline in study and conduct. No teacher consistently accomplishes all of these facets. However, the teacher who is free to study, plan, and teach most often accomplishes the greater percent of his goals with a larger percent of his students.

Teachers and other school personnel, in their relationships with children from all segments of the community, should promote formulation of desirable attitudes in pupils and understanding of cultural differences among people. Pupils can learn that people of other races, religions, and backgrounds are similar in their need for achievement, respect, and security if this is the attitude reflected by the faculty and expected of pupils. An opportunity for natural open exchange of differences and likenesses when situations arise fosters mutual respect and understanding.

When children enter kindergarten or first grade, the school building and grounds are an unfamiliar and complex new world. Learning how to use toilets, handwashing facilities, and drinking fountains requires teaching supervision. Desirable lunchroom and playground behavior must be established. Children need help in developing classroom procedures and school practices which will promote safety and order.

Pupils in the intermediate grades can share with their teacher the management of classroom lighting, ventilation, and other aspects of maintaining a pleasant and healthful environment. A visit to the boiler room can help them become familiar with ways in which their school is heated. A study of the school water supply will lead to a consideration of public water supplies, the proper use and sanitary characteristics of drinking fountains and washing and toilet facilities. Safe practices during evacuation drills can be discussed. Pupils can study sanitary food handling procedures, the wise selection of meals in the lunchroom, and the many aspects of maintaining a clean, pleasant, attractive environment.

Upper grade pupils can survey lighting in their school and homes, making recommendations for changes. Other surveys, such as of sanitary regulations for the health of food handlers or of accidents occuring on the school grounds increase health knowledge and develop desirable attitudes and behavior. Some pupils may engage in such activities as analyzing the club and activity program of the school, considering the nature of sportsmanlike behavior at athletic contests, or planning meals with the school lunchroom manager.

These suggestions are illustrative of the many and diverse opportunities for health teaching found in every school environment. Teachers can be alert to utilizing those opportunities which will meet the particular needs and interests of their pupils.

Other school personnel In any community, people are concerned with healthful school living. Administrators, teachers, physicians, nurses serving the school, parents, the school board, public health officials, social and welfare workers, members of the medical, dental, and nursing professions, architects, and engineers have interest and responsibility in insuring the most healthful living experience for each girl and boy.

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1) Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association: *School Health Services*, ed 2, Wilson, C.C. (ed), Washington, D.C. and Chicago: The Associations, 1964, p 2

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4) *Avoidance of Pressures on School-Age Children*, resolution adopted by the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, March 1962, and reaffirmed March 1963

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4. Health Aspects of Physical Education

General policies

VIGOROUS PLAY and physical activity are recognized as essential in promoting normal growth and development in children and youth and in maintaining health throughout life. To guarantee optimum health values and to foster lasting interest in such activities, students should have opportunity to participate in a broad, well-balanced physical education program of carefully selected activities.

A well-balanced program of activities includes fundamental movements, rhythm and dance activities, organized games, self-testing activities, individual and dual sports, team sports, aquatics, and winter sports planned in accordance with the needs and interests of boys and girls. The program proceeds from simple to complex activities in order to challenge and to satisfy participants as they progress through school. Variety in the program offers opportunity to develop a broad spectrum of skills for recreation and to build interest and desire for continuing participation in physical activity throughout life.

Adequate leadership is an important factor in assuring a balanced, well-taught, safe, and healthful physical education program.

A physical education activity program should be used as a laboratory for recognizing and practicing health and safety measures which result in more satisfying experiences. Those factors of health instruction that correlate naturally with physical education should be a conscientiously planned, integrated part of physical education instruction and activity.[1]

Physical fitness is one goal of a varied physical education program. The American Medical Association Committee on Exercise and Physical Fitness points out that each school is responsible for teaching the value and appreciation of physical fitness.[2] The Committee also suggests that behavioral problems often are decreased and intellectual efficiency is increased as a result of a varied well-planned physical fitness program.

Adapting to individual differences

Students engaging in physical activities should do so in accordance with the findings of their entering and subsequent medical examinations. Physical status should be evaluated by considering such factors as physical maturity, muscular development, coordination, stature, strength, organic or functional disorders, presence of infection, and physical disabilities.

The emphasis in all activity programs should be on participation but never at the expense of a student's well-being.

All pupils should be participants in physical education classes; those who, by reason of illness or disability, are unable to participate in the more vigorous phases of activity should be assigned to a modified program appropriate to their condition or in rare cases to rest. Thus, few pupils need be excused from physical education enrollment. Assignment to modified programs of physical education, including corrective physical education, should be based on a physician's recommendation; and such specialized programs should be taught by qualified teachers, with health aspects supervised by a medical adviser. A cooperative relationship between school and medical personnel is essential to an effective program.

When a student has been absent from school as a result of a severe illness or injury, he should present, before participating in regular class activities, a physician's statement that he is physically fit to do so. All students who have been ill should be observed closely by teachers for signs which might suggest that they may not be fit to participate in the normal program. A convalescent's return to participation, particularly in physically strenuous activities, should be gradual and in accord with the recommendations of a medical adviser.

Participation in activity during the menstrual period should be taken for granted for most girls, but vigorous activity should not be compulsory during its early stage. A meeting of physicians and educators at the Sixth National Conference on Physicians and Schools stated:

> There are individual differences and occasionally a girl might need special consideration. In girls with excessive bleeding, limitation of exercise is required for a brief period. The counsel of a physician should determine the program for girls who do not follow a normal pattern.[3]

Recommended is cultivation of the idea that menstruation is a normal process as contrasted to sickness.

Physical education in elementary schools

Pupils in the elementary school should participate daily in a guided program of play and physical education activities. Whenever possible this program should be conducted out-of-doors. The activities should be varied in nature and suitable to the needs, interests, and physical condition of pupils. Individual and sex differences must be taken into account. Many of the activities may be taught and engaged in on a coeducational basis.

Whether to employ a specialist in physical education or to assign the responsibility for physical education at the elementary level to the classroom teacher is a continuing controversy. The resolution of this problem at the local level should be in harmony with the general philosophy regarding the use of specialists. It is recommended that in

case the classroom teacher is assigned the responsibility, a specialist in physical education be available in the capacity of a helping-teacher or supervisor.

Beginning with the fifth grade, consideration should be given to the separation of boys and girls for instruction and participation in activities appropriate for each. However, opportunities to participate together in coeducational activities should not be overlooked. Whenever possible specialists in physical education should be employed at this grade level.

At times, physical education activities can and should be integrated with other areas of the curriculum.

Secondary school physical education

It is recommended that the policy of the school require pupils in junior and senior high school to be scheduled for daily periods of physical education. The time allotted should be sufficient to allow them to change to appropriate clothing and to have a reasonable period of activity followed by a shower.

Generally, participation in interscholastic competition should not excuse a student from regular physical education classes. However, when the curriculum offered in physical education is the same as the interscholastic sports program, exceptions may be in order.

Persons responsible for physical education should be aware that many factors influence the quality of the physical education program. Class size should be small enough to permit adequate instruction and activity. The teacher load should be comparable to that of other classes and appropriate to the type of instruction. Adequate time and equipment should be available in order that a physical education class period may be utilized for the teaching of skills, attitudes, and understandings in the program of activities.

A safe environment and an emphasis on safety in instruction is fundamental to a sound program. All possible precautions should be taken to prevent accidents. Appropriate attention to supervision in tumbling, springboard, trampoline and other apparatus are examples of essential precautions in a program. Habits of safety in activity—but not overcautiousness—should be developed in order to encourage more extensive participation.

Coeducational activities should be an integral part of the secondary school program. Skills in dancing and individual and team sports that will be enjoyed as future family recreation are particularly recommended.

Because of the danger of damage to brain tissue associated with blows to the head, neither instruction nor competition in boxing is recommended in the school program.

Secondary school physical education classes should be taught by specialists in physical education.

When the physical education staff has the responsibility of teaching health, the teacher hired should have special preparation in health education. When there are several persons on a staff, consideration should be given to hiring half of the teachers with majors in health education and minors in physical education. The other half of the teachers should have majors in physical education and minors in health education. Teaching assignments could then be concentrated in the area of major preparation.

Intramural and interscholastic programs

All students should have an opportunity to participate in an intramural program in addition to regular physical education class activities. This program should be designed to provide a broad spectrum of opportunities for students to compete against each other in the activities they have learned in physical education. A desirable school goal would be to include in the intramural program some activities suitable for every student.

Rather than limiting opportunities to participate by offering an interschool program in only a few major sports, a broader, more varied program of athletics should be offered so that a larger number of participants can benefit. Individual and dual sports such as tennis, golf, archery, swimming, wrestling, and badminton should be included as well as the usual team sports. Every youngster in the school should find a place—commensurate with his interest and athletic ability to compete—in either the intramural or interschool program.

Coaches of teams in the interschool program should be bona fide members of the faculty, should understand growth and development of children, and should know the fundamentals of their respective sports. The program should be administered under the direction of a person professionally prepared in physical education.

Girls should be especially encouraged to participate in an intramural program, as well as in other desirable club activities. Competition for girls and women should be provided in intramural and extramural sports and should be conducted in accordance with the Statement of Policies and Procedures for Competition in Girls' and Women's Sports.[4]

Participation in appropriate extramural sports competition should be a privilege offered to all girls. The girls' intramural program should be an outgrowth and complement of the school physical education program, and the extramural program should be conducted so as to complement both the intramural and instructional programs. A proper balance between these programs should be maintained with particular concern for all students. The above programs are necessary in order to meet the needs and interests of all girls.

Community interest, support, and pride should be directed toward support of the instructional program in physical education and of the intramural and extramural programs. Both the girls' and boys' programs should be administered by school officials and should be supported adequately through school funds.

Health safeguards in the athletic program

The health and welfare of students should be the primary consideration in planning and conducting athletic programs in secondary schools. The planning and execution should include representatives of the parents and physicians involved. To protect the health of competing athletes, the following policies and procedures are recommended:

- Adequate medical and dental examinations should be provided for all athletes at the beginning and as needed during each year of participation.
- Constant screening observation. Although an adequate medical examination is important, since it provides an assessment of the student's physical condition, it cannot be considered as covering the entire period of a student's participation in a sport. Faculty members who have responsibility for the sport should be alert to the day-by-day changes which may occur in their students. In this way, students who begin to deviate from their normal patterns of behavior may be referred for medical examinations. Students can be protected from participating at a time when they are not in condition for such activity.
- A physician present at all contests in contact sports. A physician should be readily available during practice sessions.
- Boys should participate in only one interscholastic sport per sport season.
- Playing seasons should be of reasonable duration, with no postseason contests. No preseason game should be played until athletes are well drilled in fundamentals and are in excellent physical condition. No interstate competitions should be held except regular season games between schools located near state borders. Contests should be confined to small geographic areas within the state.
- Competition in both intramural and interschool contests should take place only between teams of comparable ability, as determined by standardized classification on such basis as strength or age, maturity, height, and weight. These may be a part of appropriate eligibility requirements.
- Extramural competition for girls includes sports days, telegraphic meets, invitational meets, and interscholastic programs.
- All girls' athletic activities should be taught, coached, and refereed by professionally prepared leaders.
- Girls' athletic activities should be separately administered from interscholastic contests for boys.

- The contest conditions for girls' and women's sports should be in line with standards for men's sports, including budget funds, acceptable travel, protective insurance, appropriate facilities, proper equipment, and desirable practices in conduct of the events.
- A concerted program to safeguard the health and safety of high school sports participants should be implemented on a cooperative communitywide basis.[5-7] To achieve this end, sports injury conferences conducted primarily for coaches, athletic directors, and team physicians have been sponsored jointly by the local medical society, school administrator, local coaches' association, dental society, and parent-teacher groups.

Junior high interschool competition The question of junior high school interscholastic athletics is still controversial. Respected educational and medical opinions are ranged on both sides of the issue. The arguments advanced in support of each viewpoint are myriad. The available data are fragmentary and conflicting; however, one group that has given much study to the problem is the Committee on Standards for Junior High School Athletics of the American Association for Health, Physical Education, and Recreation. The Committee's point of view is that junior high interschool competition is acceptable only under certain definite regulations. Under no circumstances should such programs be conducted except under the conditions outlined in this report. It states as follows:

> . . . in those schools where adequate programs of required physical education intramurals and physical recreation are provided for all students and a limited interscholastic program is contemplated, it should be organized and conducted in accordance with the following principles:
>
> 1) The interscholastic athletics program for boys in the junior high school should make definite contributions toward the accomplishment of the educational objectives of the school.
>
> 2) The interscholastic athletics program for boys in the junior high school should supplement—rather than serve as a substitute for—an adequate program of required physical education, intramurals, and physical recreation for all students.
>
> 3) The interscholastic athletics program for boys in the junior high school should, under the administration and the supervision of the appropriate school officials, be conducted by men with adequate professional preparation in physical education.
>
> 4) The interscholastic athletics program for boys in the junior high school should be so conducted that the physical welfare of the participants is protected and fostered.[8]

The report continues:

> 1) Boxing, as a competitive sport, should be prohibited.
>
> 2) (Unless) pressures to use junior high school athletics as a farm system for the intensive development of high school prospects can be controlled . . . tackle football should not be included in the junior high school athletics program.
>
> 3) The welfare of the individual boy should be the basic criterion upon which is determined whether or not the boy should participate in interscholastic athletics.
>
> 4) . . . A program of interscholastic athletics for junior high school boys should not be contemplated or continued when conditions or pressures prevent strict adherence to the recommended controls.[9]

The American Medical Association Committee on the Medical Aspects of Sports in its statement concerning tackle football details some basic principles that are appropriate for generalization at the junior high level. Excerpts from the Committee statement follow.

The decision as to what level to begin programs of contact sports will have to be made largely on a local basis. However, the Committee submits the following suggestions to local authorities considering the matter:

A. With consideration for the health and fitness of *all children and youth,* local groups should make certain that physical education and athletic programs provide

1) A daily period of physical education for all boys and girls that includes a wide variety of activities and emphasized careful instruction adapted to individual needs.

2) Opportunity for all boys and girls to participate in an informal play and intramural program that includes a number of team games as well as appropriate individual and dual sports.

B. Having provided the above basic program, some communities may find it possible to offer certain specialized sports experiences; however, strenuous contact sports such as tackle football should be considered only when the following conditions for play can definitely be assured:

1) A medical examination including a thorough review of health history before and as needed during the season.

2) Careful matching of players by an age-height-weight formula, physical maturity, and other equitable bases.

3) The best obtainable equipment for play, properly fitted to each player and with practical adaptations such as the use of tennis shoes.

4) A faculty member (coach) in charge who understands child growth and development as well as first aid, conditioning, and the sport concerned.

5) A physician present at all contests and readily available during practice sessions.

6) Officials thoroughly conversant with the limitations of young players as well as the rules of the game.

7) Playing fields which meet standard requirements for size of area, playing surfaces and facilities for safety.

8) Written agreement as to responsibility for injury incurred in athletics made known to all participants and their parents.

C. In addition to assuring proper conditions for participation, a number of basic policies for play are required. It is essential that these include provision that:

1) No games will be played until players are well-drilled in fundamentals and have had a minimum of three weeks of physical conditioning.

2) The length of periods and the duration of the season will be appropriately modified in terms of the age of players.

3) Suitable adaptations in equipment for safety and practicality, such as the use of tennis shoes for younger age groups, will be made.

4) A player who has been ill or injured will be readmitted to participation only upon the written recommendation of a physician.

5) Upon return to play, a participant who has been ill or injured will be carefully observed and referred to a physician if there is any doubt of his condition.

6) When any injury occurs during the course of a contest, the attending physician will determine the athlete's ability to continue play.

7) During practice sessions, a player with a potentially serious injury—particularly to head, neck or spine—will be removed from play with due attendance to first aid practices, placed at rest, and given the immediate attention of a physician.

8) Emphasis will be placed on skillful performance, maximum participation, healthful play, and good sportsmanship rather than championship schedules and all-star teams.

9) On all matters of procedure and practice not covered by these policies, the first consideration will be the health and welfare of players.[10]

Later recommendations emphasize the value of mouth protection in preventing injury to the teeth. Such emphasis is now required for secondary school participants in football.

A local school should not be pressured by an enthusiastic uninformed community to participate in junior high school interscholastic competition with disregard for the precautions cited. A school may find a place for local interschool competition at the junior high school level after consideration has been given to:

- The principle that the competitive program is education and not mere entertainment

- The danger of diverting a disproportionate amount of funds for the participation of a few students
- Determining that adequate programs exist for all students
- Sponsoring competitive programs that are sound from a health and safety standpoint.

Some poor programs, despite their failings, have solid community interest and support. Sometimes improving these situations rather than eliminating them is the logical procedure. Supporting a program just because it will "go on anyway" is hardly sound medical and educational reasoning. The logical solution involves careful study, an understanding of the program by the public, and the cooperation of representatives of medicine, education, and the community in planning conditions and standards for play.

Extra-school programs

Although the school has no control over what students do outside school hours, it would seem important that school authorities be aware of the kinds of organized competitive athletics in which students participate on their own. Various leagues are being sponsored by a wide variety of community groups. If the same considerations for the health and safety of the young people are not followed by these community sponsors, the health and safety of students may be impaired. The school's interest and concern about this problem should be made known and appropriate liaison worked out with sponsoring community groups. Since the junior high competition issue is often fraught with emotion, it is not always easy for a local group to make an objective, sound decision.

It should be recognized that provision of adequate intramural and extramural play opportunities after school hours gives boys and girls an opportunity to find desirable recreational outlets for their energies. This fact should be weighed in the judgment made by a community in deciding whether it will support an adequate program of sports open to all pupils.

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5. A Health Program for the Handicapped*

IDENTIFICATION of and special provision for handicapped children is an important aspect of school health services. Handicapped pupils are helped to achieve their health and academic potentials through the attention given to their physical and mental health.

Identification of the handicapped

Children should be considered handicapped when their physical disabilities or mental difficulties, arising from any cause, require special attention from the school beyond that given to other children. The amount or degree of disability determines the need for special attention; the nature of the disability guides the kind of special attention to be given.

Some handicapping conditions are obvious. Some may be of short duration because with early recognition and good treatment the basic condition may be controlled in a manner to render it nonhandicapping. Conditions such as cystic fibrosis, cancer, or allergies may be reported to the school by the parents or the child's physician. Such reporting is strongly encouraged. Conditions such as certain vision and hearing defects, heart conditions, diabetes, epilepsy, and some mental and emotional disorders may be suspected by the teacher through observation and by classroom tests. Still other conditions may be revealed as a result of the nurse's observation of the frequency of trips by the pupil to the health service.

Social adjustment is essential

The handicapped pupil should be treated as nearly like any other pupil as possible. Any special attention given should be directed to the realistic needs of the particular individual and toward helping him to go along with his class. Modifications, exceptions, or provisions in the regular school program should be made where possible to enable the handicapped student to make a better adjustment to his tasks, teachers, and classmates. The need for modifications of any kind should be based upon the physical, social, and emotional needs of the particular child.

To live successfully within his limitations is a lesson to be learned by the handicapped child. This is important even if it means doing

*Since this chapter does not refer to all children in the special education area, and since the booklet is to be used by those not familiar with the total meaning of special education, it was the decision of the Committee to use the term "handicapped."

things in different ways and at different times from other children. Within reason, the child should be protected from feelings of incompetency, frustration, failure, or a sense of being too different.

It is obvious that these children are somewhat different from other children. If they cannot achieve a satisfactory social adjustment in the regular classroom despite special provisions based on realistic needs, help should be sought from social service resources in the school or community.

Adaptation of regular school program

Special provisions for handicapped pupils should be made insofar as possible within the classroom to which they normally would be assigned. Assignment to special classes, even within the resources of the school, should be kept to a minimum. Pupils in special classes should join with normal classes whenever feasible—in sports and assembly programs, for example—and should not be kept as a completely differentiated group. In assigning pupils to special classes, due consideration should be given to mental capacity and previous education attainments as well as to physical disabilities. There is need for periodic review of the health condition of all handicapped pupils, with a corresponding review of their programs. Placement requires careful study of the individual pupil. There is no rule of thumb.

Among the special provisions that the school may properly make for handicapped pupils continuing in regular classes are:

- Specially constructed chairs and desks for orthopedically disabled children
- Appropriate seating arrangements, such as "down front" for children with vision or hearing defects
- Provision of hearing aids
- Provision of special educational materials and equipment, such as books with large type, an electric typewriter, etc.
- Scheduling of classes all on one floor
- Scheduling which permits rest periods from regular classroom work
- Resting facilities for children with cardiac or other impairments
- Permission to attend school for only part of the day
- Adaptation of physical education requirements
- Transportation to and from school.

If a school makes adequate adaptations for individual disabilities, more children with physical handicaps may obtain their education in regular classes. When new school buildings are constructed all on one level and with no steps at the entrances, all but the children with a most severe motor disability may be educated in the regular classes.

For some pupils a combined hospital and school program may be desirable for certain periods of time. Most children with epilepsy, under medical care, may attend regular school, but teachers and classmates

should be properly prepared in advance to understand their problems. The health service personnel, especially the nurse, can be very helpful in explaining the disease entity to the teacher and to the children as may be indicated. An in-service meeting, with the physician participating, may be held so that all members of the school staff understand the nature of the condition.

Some children with both long- and short-term handicapping conditions will be on a regimen of drug therapy. The health services personnel should be informed of the drugs prescribed, the dosages, and the side effects. Insofar as possible, drugs should be scheduled to be given at hours when they will not have to be adminstered during the school day. When it becomes imperative for a child to take medications during the normal school hours, policies should be adopted, then put in writing, and the procedures to be followed should be outlined and included with the medical standing orders.

Special facilities or programs

Children with a visual acuity of 20/70 or less in the better eye who must use vision as their chief channel of learning will benefit—after correction or treatment—from educational materials and equipment adapted to their visual needs. Large-print books, large-scale maps, and mechanical devices can be provided and used under the direction of a teacher qualified in the educational and psychological implications of various eye conditions. The children may go to a special classroom for close eye work and special instruction but join their regular classmates for recitation and other work not requiring close eye use; or they may remain in their regular grades at all times and there be assisted through the services of a specially-prepared itinerant teacher.

Part-time special classes or special periods should be provided for pupils who need lip reading instruction or speech correction. In some areas, speech-handicapped pupils may be given help by an itinerant teacher.

Pupils with physically crippling conditions—whether caused by cerebral palsy, poliomyelitis, or other disease, or by accident—may benefit from a special class or special school. They should not be enrolled in such classes if it is possible to make adaptations appropriate to their disabilities in their regular class program.

Special classes are appropriate for children with IQ's between approximately 50 and 70. They should, however, have individual intelligence tests by a competent tester before being enrolled in a special class.

The "slow learners," with IQ's between approximately 70 and 90, usually should be enrolled in regular classes. Well-trained teachers will recognize the mental handicap of these children and give them opportunities for success and adjustment within their range of achievement.

As with other handicapping conditions, attempts should be made to work with the emotionally disturbed child in the regular classroom. If continuation of this arrangement seems undesirable for the pupil or his classmates, schools should provide special classes.

In developing plans for special programs, educators will need the assistance of a consulting psychiatrist, psychologist, and case workers. Joint committees made up of educators and the above special school and community personnel are needed for appraising the need and developing comprehensive plans.

Totally blind or deaf children require particular consideration and very specialized educational attention. A planned program for finding such children in the community is needed. They should be enrolled in classes or schools adequately equipped and staffed to provide programs of education adapted to their limitations.

Since it is the responsibility of the school to provide education for all children in a community, some provisions should be made for the regular instruction of hospitalized children and the few home-bound children who are too handicapped to be enrolled in or attend school at all. Very often the latter are completely forgotten and overlooked. Instruction by a special tutor, home teacher, or specially assigned teacher will help these children to continue their education.

6. Qualifications of School Health Personnel

THE APPLICATIONS of sound school health policies and the operation of a successful school health program require personnel well prepared for their tasks and well qualified to solve day-by-day problems arising out of continuing and changing health needs.

Specialized health personnel

Preservice preparation Those serving in the various specialized areas of health must be trained to meet certain minimum standards, as established by certification and licensing requirements. However, whenever possible, the more exacting qualifications of their respective professional organizations should be required by the employing agencies. The qualifications of school physicians and school dentists, whether employed by boards of education or departments of health, should meet or exceed those recommended by the Committee on Professional Education of the American Public Health Association.[1] In the same manner, the qualifications of public health nurses serving schools should meet or exceed those recommended by the American Nurses Association and those recommendations prepared by similar groups.[2-4] Other specialized health personnel, such as psychologists, counselors, health educators, school social workers, nutritionists, and food service supervisors, should be prepared in accordance with the standards set by their respective professional organizations.[5-8]

In-service education Professional health personnel require programs of in-service education in order to keep abreast of current research. New knowledge concerning medical, dental, and public health problems as well as new educational trends in school and community require well-planned programs of continuing professional education. These are organized on a regional, state, or local basis. Larger communities often are able to provide continuous local programs of in-service education.

A continuing education program performs many useful functions. Improved communication and understanding are accomplished by bringing together different professional disciplines engaged in school health activities. This program also offers opportunity for specialists in specific areas to meet and study common problems.

Professional consultation and leadership is required for the medical and dental aspects of the school health program. Often the nurse serving the school, if employed by a board of education, works alone. Part-time school physicians and dentists are frequently without the benefit of professional leadership and direction.

An increasing number of medical schools are preparing graduates to assume that professional leadership. More medical school curriculums are including courses in community health and principles of school health as a part of the physician's preparation. Those who have not had this orientation in school health work may find it possible to take postgraduate extension courses or evening service courses through a nearby college or university.

Continuous review of new literature—including magazines and bulletins—and of visual aids in the field of health education is essential to professional school health personnel.

It is also essential to recognize that school health personnel deserve the best of specialized professional supervision. Such supervision acts to clarify the responsibilities of the individual in his relationship to the school. Local circumstances cause wide variation in duties. The recognized and consolidated school districts and large communities may need a full-time nurse supervisor. In some situations, a nurse employed by the health department who meets the qualifications for public health nurses serving schools and has additional preparation as a supervisor may be utilized by the board of education as a source of guidance and supervision for a school nurse. In other situations, the nurse who serves the school may be employed by the health department and under a cooperative arrangement will render service to the school system.

Personal health as a qualification The personal health of an applicant should be considered a part of his qualifications by schools employing personnel. In the pamphlet, *Health of School Personnel,* the Joint Committee on Health Problems in Education of the National Education Association and American Medical Association suggests:

> There is no group whose health is more important to society than that of the staffs of our schools. Since staff and pupil contacts occur continuously during the school day, the health of the staff directly affects the health of the pupils. Communicable diseases may be spread from staff to pupils. Debilitating sickness of a staff member decreases the effectiveness of a part of the school program and prevents pupils from obtaining full value from their school experiences. Good health is important for all members of the teaching, administrative, and service staffs, including bus drivers, secretaries, custodians, and food handlers.
>
> Rather than limiting attention to disease problems, a program related to the health of school personnel should include measures to maintain and improve staff health. School concern for staff health reflects interest in an employee's welfare and appreciation of the fact that good health increases his competence.

> The administration's understanding of the influence of a healthy school staff upon the total educational program is shown in its policies related to pre-employment health examinations, periodic health examinations, and measures designed to give employees feelings of security and self-respect.[9]

Preparation for teachers

Undergraduate preparation Because the teacher has such an important role in the school health program, institutions preparing teachers should provide sufficient opportunities for prospective teachers to acquire necessary and desirable competencies in health education. This requires an extensive program in health education covering competencies in the three basic areas of school responsibility, namely, healthful school living, school health services, and health instruction. Specific competencies in teacher education in these areas may be inferred from previous sections of this bulletin.

The properly prepared teacher should be a healthy, well-adjusted individual with accurate up-to-date information about health, the principles of healthful living, and of child growth and development. The teacher should know what constitutes an adequate school health program and should be prepared to assume the many responsibilities for the health of students which the operation of a sound school health program requires.

Colleges and universities preparing teachers should provide an adequate health service program. This should be directed by a qualified physician, preferably with experience or training in college health work.[10] Nursing services should be provided by professional registered nurses with preparation or experience in the handling of health problems affecting the college age population. Additional preparation and experience in public health is recommended.

The college health service program should be broad in scope, encompassing preventive medicine; mental health counseling; medical care, including psychiatry; supervision of the environment; and health education. Such a program, properly organized and developed, becomes an integral part of the educational experience of the prospective teacher, demonstrating the importance and value of health as a personal and community asset. The college should provide a safe and healthful environment for all aspects of student life in study, work, and play. It is recommended that the environmental health and safety program be administered through the college or university health service to insure proper coordination.[19]

In addition to the courses in personal and community health, all prospective teachers should have preparation in the following areas: 1) child growth and development, 2) school health program, and

3) methods and materials of health education. These educational experiences will help the teacher maintain and promote his own health as well as that of his pupils. The professional preparation in school health will help the teacher develop the following competencies:

1) An understanding of the growth and development characteristics of children at various ages

2) Competence in health screening techniques, such as those employed for vision, hearing, and growth

3) Proficiency in health guidance and counseling

4) Ability to work with health specialists and parents in the follow-up of pupil health problems

5) An understanding of the different aspects of the school health program and the importance of cooperative relationships between the school and community in health activities

6) An awareness of the various environmental factors—physical, social, and emotional—and their impact upon the child's health.[11]

An important part of the preservice preparation of teachers is active participation in school health activities, including experiences and supervised student teaching in the health program of the demonstration school or other student teaching situation.

Those institutions which offer professional preparation for secondary teachers should provide a specialized curriculum in health education in accordance with accepted standards. Since health education is recognized as an integral part of the school curriculum, the number of qualified teachers must be increased.

The Teacher Education Commission for Health Education of the American Association for Health, Physical Education, and Recreation has developed a self-study and appraisal guide to assist institutions in preparing the health education specialists. The Commission recommends that all prospective health educators have a basic preparation in the health, physical, and social sciences. In addition, the Commission has identified areas of professional preparation. Examples of the types of courses implied by the recommendations are as follows:

- Personal and Community Health Problems
- First Aid
- School Health Program
- Safety Education
- Methods and Materials of Health Education
- Nutrition
- Mental Health
- Community Health Programs
- Modern Concepts of Health and Disease
- Student Teaching
- Human Growth and Development
- Family Health Problems.

Until such time as it is feasible for schools to employ teachers with a major in health education, it is recommended that all teachers assigned to health instruction have at least a minor or its equivalent.

Delegates to a national conference on professional preparation in health education recommended the following list of priority course areas:

- Personal and community health
- The school health program
- Child growth and development
- Methods and materials in health and safety education
- School-community relationships.

These courses are in addition to such health science prerequisites as biology, anatomy and physiology, chemistry, and physics. Prerequisites in the social sciences should include psychology and sociology.

The American College Health Association recommendations include standards of qualifications for health educators.[13] These standards are published and available to institutions and accrediting agencies. The professional preparation for health coordinators is the equivalent of the health educator plus additional graduate study and specialized experience in curriculum development and school and community health work.

In-service preparation Continuing professional education performs a vital function for the health educator. First, it may offer an opportunity to fill gaps in the preparation of health teachers. Second, new professional requirements may have made study in some areas essential. Third, in-service education is required to keep all teachers informed on new knowledge and procedures.

Continuing educational opportunities are available at teacher-education institutions through extension courses and health education workshops. Well-organized in-service meetings provided by school agencies on a local, state, or regional basis afford further opportunities. Such things as professional literature in health education, health texts for pupils, periodicals, special bulletins, and new teaching aids also supplement the knowledge of the teacher in the field.

The professional competency of the teacher and all others having a responsibility for school health procedures is the key to improving programs and furthering the health of students.

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Franklin M. Foote, M.D., Dr.P.H.
Hartford, Connecticut • 1964-69

Ruth A. Frary, M.D.*
Watsonville, California • 1963-68

Harold M. Hobart, M.D.
Washington, D.C. • 1961-66

Granville W. Larimore, M.D.*
Albany, New York • 1959-64

Guy N. Magness, M.D.
University City, Missouri
• 1965-70

John L. Reichert, M.D. (dec.)*
Chicago, Illinois • 1960-65

Wallace Ann Wesley, Hs.D**
Chicago, Illinois • 1962-67

John H. Cooper, P.E.D.
(NEA staff liaison)
Washington, D.C. • 1963-65

Edward Mileff, Ed.D.
(NEA staff liaison)
Washington, D.C. • 1965-66

*Chairman for 1 year

**Secretary